UNITED STATES PATENT AND TRADEMARK OFFICE

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10/643,471	08/19/2003	Yoshihiro Uchiumi	450100-04713	4086

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EXAMINER
CHIO, TAT CHI

ART UNIT	PAPER NUMBER
2621	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _22 January 2008_.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-12_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-12_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/22/2008 has been entered.

2. Applicant's arguments filed 1/22/2008 have been fully considered but they are not persuasive.

 Applicant argues that Kato fails to teach or suggest a recording means for recording the streaming data accumulated in the accumulating means in a unit recording area of the information recording medium when the amount of the streaming data accumulated in the accumulating means has reached a capacity of the unit recording area of the information recording medium, and a recording the stream data accumulated in the accumulating means in a unit recording area of the information recording medium when the boundary of the data sets is detected by the detecting means, regardless of the amount of the streaming data accumulated in the accumulating means.

 In response, the examiner respectfully disagrees. Kato teaches recording means for recording the streaming data accumulated in the accumulating means in a unit recording area of the information recording medium when the amount of the streaming

data accumulated in the accumulating means has reached a capacity of the unit

recording area of the information recording medium, and, when the boundary of the

data sets is detected by the detecting means, regardless of the amount of the streaming

data accumulated in the accumulating means, adding padding data subsequently to the

streaming data accumulated in the accumulating means until the total amount of data

reaches the capacity of the unit recording area of the information recording medium,

and recording resulting data in the unit recording area of the information recording

medium (write section of Fig. 1, and col. 6, lines 45-67 and col. 7, lines 1-13), and

wherein the boundary of each data set is recorded in a position coinciding with a cluster

boundary, thereby, when the data set is deleted from the unit recording area of the

information recording medium, all the padding data that was added is deleted and

streaming data in a next unit recording area coinciding with a next data set remains

(Fig. 17A, Fig. 17B, and col. 11, lines 7-46).

Applicant argues that Kato does not teach or suggest that the recording has a

start boundary at a beginning of the unit recording area and an end boundary at the end

of the unit recording area by determining each time the stream data coincides to a

complete data set if the complete data corresponds to a whole area of the unit recording

area and adding padding data subsequently to the streaming data accumulated in the

accumulating means until the total amount of data reaches the capacity of the unit

recording area of the information recording medium.

In response, the examiner respectfully disagrees. Kato teaches in Fig. 7 that the

source packet output to the file system is subdivided into 32 aligned units. When

determined that external input of transport packets has ended, the null packet generator

determines whether or not the packet No. TPN last input from the stream analyzer is a

multiple of 32. When determined the packet No. TPN that was input last is not a multiple

of 32, a null packet will be issued. An end boundary of the unit recording area is

identified when the packet No. TPN last input from the stream analyzer is a multiple of

32, and a start boundary of the current unit recording area is the end of the previous unit

recording area as illustrated by Fig. 6. Since when the packet No TPN last input from

the stream analyzer is not multiple of 32, null packet will be issued, it is equivalent to

adding padding data subsequently to the streaming data accumulated in the

accumulating means until the total amount of data reaches the capacity of the unit

recording area of the information recording medium (see col. 6, line 45-col. 7, line 13).

3.   Claims 1-12 are rejected under 35 U.S.C. 102(e) as being anticipated by Kato

(US 7,106,946 B1)

        The applied reference has a common assignee with the instant application.

Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art

under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome

either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in

the reference was derived from the inventor of this application and is thus not the

invention "by another," or by an appropriate showing under 37 CFR 1.131.

        Consider claims 1 and 4-6, Kato teaches a recording apparatus for recording

streaming data on an information recording medium, the recording apparatus

comprising:

- detecting means for detecting a boundary between data sets that successively constitute the streaming data (stream analyzer of Fig. 1);

- accumulating means for accumulating the streaming data (stream analyzer of Fig. 1); and

- recording means for recording the streaming data accumulated in the accumulating means in a unit recording area of the information recording medium when: the amount of the streaming data accumulated in the accumulating means has reached a capacity of the unit recording area of the information recording medium, and, the boundary of the data sets is detected by the detecting means, regardless of the amount of the streaming data accumulated in the accumulating means and wherein the recording means identifies a start boundary at a beginning of the unit recording area and an end boundary at the end of the unit recording area by determining each time the stream data coincides to a complete data set if the complete data corresponds to a whole area of the unit recording area and padding data is added subsequent to the streaming data accumulated in the accumulating means until the total amount of data reaches the capacity of the unit recording area of the information recording medium, wherein the recording means records resulting data in the unit recording area of the information recording medium (write section of Fig. 1, and col. 6, lines 45-67 and col. 7, lines 1-13).

- Wherein the boundary of each data set is recorded in a position coinciding with a cluster boundary, thereby, when the data set is deleted from the unit recording area of the information recording medium, all the padding data that was added is deleted and streaming data in a next unit recording area coinciding with a next data set remains (Fig. 17A, Fig. 17B, and col. 11, lines 7-46)

Consider claim 2, Kato teaches a recording apparatus, wherein the streaming data is an MPEG stream and the data sets are groups of pictures (col. 7, lines 48-51).

Consider claim 3, Kato teaches a recording apparatus, wherein the unit recording area of the information recording medium is a cluster (col. 5, lines 49-63).

Consider claims 7 and 10-12, Kato, teaches a recording apparatus for recording streaming data on an information recording medium, the recording medium comprising:

- generating means for generating the streaming data by encoding an information signal based on a predetermined encoding scheme so that the data amount of data sets that successively constitute the streaming data will be an integer multiple of a capacity of a unit recording area of the information recording medium (stream data base maker, file system, error correction section, and modulator of Fig. 1);

- recording means for recording the streaming data generated by the generating means on the information recording medium (write section of Fig. 1).

- wherein recording is initiated when the amount of the streaming data

  accumulated has reached a capacity of the unit recording area of the

  information recording medium, wherein recording is initiated when the

  boundary of the data sets is detected regardless of the amount of the

  streaming data accumulated, and wherein the recording has a start

  boundary at a beginning of the unit recording area and an end boundary at

  the end of the unit recording area by determining each time the stream

  data coincides to a complete data set if the complete data corresponds to

  a whole area of the unit recording area and adding padding data

  subsequently to the streaming data accumulated until the total amount of

  data reaches the capacity of the unit recording area of the information

  recording medium, and recording resulting data in the unit recording area

  of the information recording medium (col. 6, line 45-col. 7, line 13, and

  write section of Fig. 1), and

- wherein a boundary of a data set is recorded in a position coinciding with

  a cluster boundary, thereby, when the data set is deleted from the unit

  recording area of the information recording medium, all padding data that

  was added is deleted and streaming data in a next unit recording area

  coinciding with a next data set remains (Fig. 17A, Fig. 17B, and col. 11,

  lines 7-46).

Consider claim 8, Kato teaches a recording apparatus, wherein the information signal is a video signal, the streaming data is an MPEG stream, and the data sets are groups of pictures (col. 7, lines 48-51).

Consider claim 9, Kato teaches a recording apparatus, wherein the unit recording area of the information recording medium is a cluster (col. 5, lines 49-63).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TAT CHI CHIO whose telephone number is (571)272-9563. The examiner can normally be reached on Monday - Thursday 8:30 AM-6:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thai Tran can be reached on (571)-272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/T. C. C./
Examiner, Art Unit 2621

/Thai Tran/
Supervisory Patent Examiner, Art Unit 2621